



*Photo by Jamey Giddens*

**CCAD Process Optimization Manager George Kunkle III was presented the First Annual Joint Depot Maintenance Excellence Award-Individual during the DoD Maintenance Symposium and Exhibition, Oct. 23-26 in Reno NV. Kunkle was recognized for his success implementing Lean Six Sigma on CCAD's Air Force HH 60 Pavehawk line.**

### **CCAD Lean guru wins first ever JDM Excellence-Individual Award**

By Jamey Giddens  
CCAD Publicist

CCAD Process Optimization Manager George Kunkle III was recently the recipient of the First Annual Joint Depot Maintenance (JDM) Excellence Award-Individual. Kunkle accepted the award on Oct. 26, 2006 in Reno, NV, as part of the 2006 Department of Defense (DoD) Maintenance Symposium, Oct. 23-26.

According to Les Campbell, deputy director of the Joint Depot Maintenance Activities Group (JDMAG), Kunkle was selected as a result of his outstanding performance while serving as process manager for CCAD's Air Force HH-60 Pavehawk line.

The Air Force Pavehawk is derived from the UH-60 Blackhawk, manufactured by Sikorsky Aircraft Corporation. Its primary function is to conduct day and night operations in hostile environments in order to recover downed aircrew or other stranded personnel during wartime. In peacetime the Pavehawk is used in civilian search and

rescue missions, such as in the aftermath of natural disasters; to provide international aid; to help in counter-drug operations and to provide space shuttle support for NASA.

Kunkle's leadership proved instrumental in the implementation of Lean Six Sigma principles used to revolutionize the Pavehawk line at CCAD.

Lean Six Sigma is a process improvement philosophy that combines the principles of Lean manufacturing (a Toyota management philosophy concerned with removing waste from a process) and Six Sigma, a Motorola-trademarked methodology that strives to control variation.

"I was pretty excited," said Kunkle on hearing he had won the award. "There's a lot of stiff competition out there throughout the entire Department of Defense. Most of all I am just thrilled because this gives CCAD recognition for all the work that has been done here. It has been an amazing last two to three years with the turn around we've seen on our production lines due the depot embracing Lean Six Sigma initiatives."

Under Kunkle's guidance and skillful execution of Lean Six Sigma tenets, Turn-Around-Time (TAT) for repair work done on the Air Force HH60 Pavehawk was reduced from 240 days to an average of 114 days, thus reducing cost to well under or at scheduled funding levels and allowing CCAD to take on additional workload.

Kunkle also conducted a painstaking review of the 700-plus page Statement of Work (SOW) for the Pavehawk line. He consulted with both CCAD technical experts and Air Force officials to remove excess waste and over-processing, resulting in a tighter, more streamlined and efficient documentation of the process.

Other Lean Six Sigma implementation on the Pavehawk line under Kunkle's direction included:

- Merging process optimization with Lean Six Sigma practices, coaching every aspect of product flow from pre-shop analysis to flight test, ensuring the integration of Lean Six Sigma concepts and practices to promote sustainability.
- Producing the first Air Force aircraft at CCAD with a TAT less than 120 days and \$50,000 under budget.

Held annually, the DoD Maintenance Symposium and Exhibition allows government and industry executives the opportunity to come together and explore the latest developments and advancements in DoD weapon systems and equipment maintenance. Kunkle will receive his award during a session on Depot Contributions to Weapons Readiness in the Global War on Terrorism.

CCAD Commander COL Timothy Sassenrath, who will be present at the symposium to take part in discussions on DoD's continuing commitment to provide the Warfighter with sustained materiel readiness, will also get the chance to see Kunkle receive his citation.

"It was a great privilege for CCAD to nominate such an outstanding individual as George Kunkle for this award," said Sassenrath. "George has played a lead role in helping to Lean out processes depot-wide. This award is a testament to his and CCAD's dedication to improving processes and reducing waste via Lean Six Sigma initiatives."



*Photo by Jamey Giddens*

**Texas A&M-College Station Lean Engineer Angela Gonzales reviews the 6S Communication Board Tuesday on the CCAD Pave Hawk Line. According to Lean Chief Frances Rosarius communication from the top floor to the bottom floor is essential for Lean Six Sigma to be implemented successfully.**

### **Lean success starts with 6S**

By Jamey Giddens  
CCAD Publicist

Hangar 8 employees on the much-heralded Pave Hawk Line were busy the week of Jan. 29 with a 6S Lean Six Sigma event as a part of continual improvement efforts on the line. The Pave Hawk line has received wide-ranging praise for its phenomenal successes in recent years thanks to the innovative implementation of Lean Six Sigma.

"It has been an amazing last two to three years with the turn around we've seen on our production lines due the depot embracing Lean Six Sigma initiatives," said CCAD Process Optimization Manager George Kunkle III.

Implementing Lean Six Sigma on the Pave Hawk Line has resulted in a substantial change in turn-around-time (TAT) for Pave Hawks repaired and recapped at CCAD, which in turn has saved tax payer dollars and brought more work into CCAD.

According to published reports, TAT work done on the Air Force HH60 Pave Hawk was reduced from 240 days (prior to Lean Six Sigma implementation) to an average of 114 days, thus reducing cost to well under or at scheduled funding levels and allowing CCAD to take on additional workload. Lean Six Sigma has also been credited by depot leadership with producing the first Pave Hawk with a TAT less than 120 days and \$50,000 under budget.

But don't expect CCAD to rest on its laurels.

"We are tremendously proud of the success we've had on the Pave Hawk line, but improvement is an ongoing process," said CCAD Commander COL Timothy Sassenrath. To that end the depot is looking forward to the future, taking the necessary steps to keep offering its customers a product that is on schedule, reasonably priced and of the highest level of quality and that all begins with the 6S's of Lean Six Sigma.

"The 6S's are: Sort Out – Get rid of what is not needed; Straighten – Organize what belongs; Scrub – Clean up, see and solve problems; Safety – See and fix unsafe conditions; Standardize – Who does what to keep it up and Sustain – Be disciplined in keeping it organized," explained Lean Chief Frances Rosarius.

On Wednesday Lean facilitators and employees on the Pave Hawk line held an auction as a part of their 6S activities.

"During the auction we basically take unclaimed items, tools or what not and give the workers a chance to claim them before they are removed from the area," said Angela Gonzales, a Lean Engineer from Texas A&M-College Station who is working in conjunction with CCAD's Lean team.

As the event continued Pave Hawk workers and the Lean Team forged a mutually respectful and cooperative partnership to figure out how to best take the waste out of their workspace and processes, which studies have proven results in increased productive. For more information on the 6S's of Lean visit the Lean Team's site on the CCAD Intranet <http://ccadc2intweb/lean/index.htm>.





Photo by Jamey Giddens

From (L. to R.) DDCT-Corpus Christi Commander Lt. Col. Timothy Orner and CCAD Commander Col. Timothy Sassenrath following the signing of the charter making DDCT's Lean journey official.

## DDCT adopts a Lean attitude

By Jamey Giddens CCAD Publicist

Defense Distribution Depot-Corpus Christi (DDCT) is embarking on the much heralded Lean Six Sigma journey in order to better improve its processes, eliminate waste and ultimately provide CCAD and the War Fighter with the best delivery times possible. During the week of May 8-12 DDCT began its Lean journey with a Value Stream Map (VSM) event. However the decision to implement Lean Six Sigma principles dates back to August of last year, according to DDCT Commander Lt. Col. Timothy Orner. "Back in August of 2005 we at the Distribution Center established a number of our annual goals," said Orner. "Becoming a Lean organization was one of those goals. It nested with our higher headquarter's goals of embracing Lean for many reasons. Number one to have more efficient, effective processes." Orner added that providing better return on investment dollars for the Department of Defense (DoD) and DDCT's customers-CCAD and the Warfighter-in terms of performance, cost and productivity were also pivotal factors for DDCT when deciding to go Lean.

“What happened the week of May 8 was our initial implementation,” said Rich Alvarado of the Lean Material Management Office. “DDCT put together a Lean Core Team comprised of 12 people, two from each work area with different backgrounds and experience. “

Alvarado said those 12 individuals were then trained on the fundamentals of Lean before mapping out DDCT’s current state, or how business is being done prior to Lean implementation.

“Areas of opportunity (where issues, problems and/or waste) were discovered and the team developed a Future State Value Stream Map that would improve processes,” said Alvarado.

The team also developed an annual implementation plan revealing their hope to reduce overtime by 17 percent. They also hope to be able to process, maintain and deliver material to customers at an accuracy rate of 99 percent, according to Alvarado.

“Lean will provide them the education and tools they need to have visibility on how they operate and continue to improve for success,” said Alvarado.

When asked about his team’s initial response to Lean implementation Lt. Col. Orner said he was impressed by how the initiative had positively affected DDCT’s morale.

“One thing I like about Lean is how it drives the culture climate of an organization,” said Orner. “I’ll tell you to see the excitement of my team as they are going through the Lean process feeling empowered, it convinces me that Lean is critical to the lifeblood of this organization.”

DDCT serves as the primary wholesale distribution point for major components to support helicopter repair missions for DoD and Foreign Military Sales customers worldwide For more information contact Jamey Giddens, CCAD Publicist at (361) 961-4618 or DSN 861-4618.



Photo by Jamey Giddens

**From (r. to l.) DDCT Lean Team member Lamar Foster briefing DDCT Commander Lt. Col. Timothy Orner and CCAD Commander Col. Timothy Sassenrath during a Value Stream Map of DDCT's work process.**

### **CCAD and Lean: What the workers have to say**

By Jamey Giddens

CCAD Publicist

A lot of people get nervous when asked to get up and speak before a crowd. Especially if that crowd includes the likes of your depot commander, but if Deborah Uhlenhaker was nervous while briefing a Value Stream Map of the UH-1N, she didn't show it. But then again, why should she be nervous? After participating in eight Lean events Deborah is used to the pressure of providing her leaders with an accurate assessment of a system's processes and how those processes can be improved by implementing the revolutionary theories of Lean Six Sigma.

Uhlenhaker, CCAD aircraft program manager, who oversees both the Pavehawk line—where a wildly successful Lean Six Sigma journey began in March of 2004—and the UH-1N line, said she believes implementing Lean Six Sigma principles makes the work to be done at CCAD easier for the workers who have to do it.

"Lean initiatives can be very beneficial to a process," said Uhlenhaker. "It gives the people that are actually doing the work a chance to provide their much needed input and ideas, giving them a sense of ownership of the processes and the products."

Uhlenhaker believes the best ideas about process improvement come directly from the people performing the work and Lean Six Sigma gives them the tools to implement their ideas and see positive changes made.

### **The proof is in the Pavehawk...line that is**

Prior to implementing Lean Six Sigma on the HH-60 Pavehawk line, the program was overrunning costs by approximately 40 percent. The average turn-around-time (TAT) for Fiscal Year 2000 was 73 percent behind schedule. However, following Lean Six Sigma implementation and other CCAD initiatives, the average TAT jumped ahead by 8 percent, an improvement of 81 percent, as of Oct. 2005 data provided by the CCAD Lean Office.

Lean Six Sigma principles were applied in addition to other initiatives that added to the success on the Pavehawk line, which Uhlenhaker stresses is essential to remember. "It takes more than just Lean Six Sigma to make major changes and improvements," said Uhlenhaker. "For example on both the Pavehawk line and the UH-1N line we have assigned an optimizer to assist with process changes and improvements." CCAD's mutually beneficial partnership with Sikorsky was also cited as being integral to the success of the Pavehawk program's improvements. According to the CCAD Lean Office, Sikorsky greatly assisted the line's success by having parts and kits readily available for the production process which reduced wait time.

### **A newcomer's perspective**

While Deborah Uhlenhaker could be considered a veteran as far as it pertains to participating on Lean Six Sigma teams, Aircraft Mechanic Nicholas Allcott is a relative newcomer to the process, although not to CCAD. Allcott, who recently participated in his first Lean Six Sigma event in the Apache Main Disassembly Area, has been with CCAD for about five years.

"My experience with Lean has really helped me to realize the most efficient way to use space," said Allcott. "[After implementing Lean Six Sigma] instead of having to walk halfway across the shop to get tools, they're right there where we need them."

Allcott also added that thanks to Lean Six Sigma, instead of having to wait as much as half an hour for the necessary paperwork to complete a task to be signed off by the proper authorities, the paperwork is now coming back in only a few minutes.

"Lean Six Sigma has improved work in our area fairly dramatically," said Allcott. "Older spaces where multiple components were getting cluttered were combined or done away with and the new space was designed around the Apache Main Disassembly. There is also a new building for the engines and transmissions that also came about as a result of Lean Six Sigma."

According to Allcott, Lean Six Sigma has helped the Apache Main Disassembly Area save a lot of time and unnecessary effort.

"We've cut down time in the Apache Main Disassembly area from 77 hours to 28 hours," said Allcott "Lean Six Sigma taught us how to work smarter, not harder."



## **CCAD helps DDCT cut the fat**

As reported in the May 19<sup>th</sup> issue of *The Aircraftsman* CCAD has partnered with Defense Distribution Depot-Corpus Christi (DDCT) to share the knowledge it utilized in helping make Lean Six Sigma journeys on the Pavehawk line and in the Paint Shop such successes.

With DDCT's parent agency Defense Logistics Agency adopting Lean Six Sigma approaches, DDCT Commander Lt. Col. Timothy Orner said he was thrilled to have the opportunity to utilize CCAD's experiences with Lean Six Sigma, and many of his depot's employees seem to echo that sentiment.

DDCT Supply Clerk and Dispatcher Lamar Foster, who came to DDCT in October of 2005 following 22 years of military service, is a member of DDCT's premiere Lean Six Sigma team. Although the initiative is in its infancy, Foster said he is already impressed by the positive changes he's begun to see.

"Looking at the different process to improve what we do for our customers-mainly CCAD-is important," said Foster. "We are in the process of looking at various processes where we can improve our customer service to CCAD."

Foster said DDCT's local delivery area, the packing area and the canning area are three places his team is giving major consideration to as they assess areas that Lean Six Sigma can assist with improving work processes. However, it is the receiving and delivery aspect of DDCT's support for CCAD that is receiving most of the team's attention.

"Receiving is a big part of what we do here," said Foster.

According to Foster, DDCT's work force has been fairly receptive to implementing the process changes and/or improvements suggested by Lean Six Sigma findings.

"One good thing is that everyone on the Lean team has had the chance to go out to their work area and thoroughly explain the changes to the workers," said Foster

## **Communication between DDCT and CCAD is the key**

Foster's coworker Barbara Mircovich, distribution process worker, credits CCAD Lean Management Analyst Rich Alvarado with giving her the necessary tools she needs to help make DDCT's Lean Six Sigma journey a success during her very first Lean Six Sigma training session.

"Rich was outstanding," said Mircovich, "very knowledgeable and helpful."

During the training session held by Alvarado, Mircovich was made more aware of how crucial open communication lines between CCAD and DDCT are to the success of the two depots' working relationship.

"So many things that we do at DDCT have a huge impact on CCAD and vice versa," said Mircovich. "But a lot of times we don't realize that, which is why improving the lines of communication is so important."

Mircovich said Lean Six Sigma training has helped her understand how CCAD and DDCT could improve its relationship, i.e. by better coordinating schedules for transport and delivery and improved synchronization of drop off points.

"As we begin the [Lean Six Sigma] journey these are just some of the areas of improvement that have come up that would help us to provide CCAD with the superior customer service they are looking for."

## **CCAD manager wins first ever JDM Award for Individual Excellence**

*By Jamey Giddens, CCAD Public Affairs*

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"It was a great privilege for CCAD to nominate such an outstanding individual as George Kunkle for this award," said Sassenrath. "I couldn't be happier about being there with him at the symposium when he accepts his citation. George has played a critical role in helping to Lean out processes depot-wide. This award is a testament to his dedication to improving processes and reducing waste via Lean Six Sigma initiatives."